Delivering phased-care for periodontitis patients under UDA banding in England: Road map to prevention and stabilisation

Purpose of document

To support the delivery of optimal periodontal care under the existing General Dental Services (GDS) contract, ensuring that dental professionals are able to focus their resources on supporting patients who engage in behaviour change, risk factor control and improved oral hygiene, to a point of periodontal stability, or referral to Level 2/3 services if required.

NB: This document is to be read in conjunction with the accompanying Avoidance of Doubt (AOD) document for periodontal care.

Background

It is recognised that the UDA banding system within the current GDS contract does not encourage the provision of contemporary periodontal care for periodontitis patients who engage in behaviour change and improved plaque control. It supports an approach that focuses on brief physical interventions using a "repair" model of care, rather than encouraging risk-driven prevention and stabilisation. The prevention model focusses on personalised patient education and supporting patient engagement in improving plaque control, and requires time spent by the Dental Professional (DP) in patient training, more than in physical treatment. The Evidence-Based S3 Periodontal Treatment Guidelines delineate four steps to care[1]. **Figure 1** is a schematic diagram which illustrates the greatest cost-benefit for patients and for public finances is gained by investing more time in step-1 of care, with decreasing cost-effectiveness towards the right-hand side of the treatment pathway (Steps 2-3)[2]. A large body of evidence supports the critical role of patient education and support in achieving meaningful, cost effective outcomes in the short (Step1) and longer term (Step 4)[3].

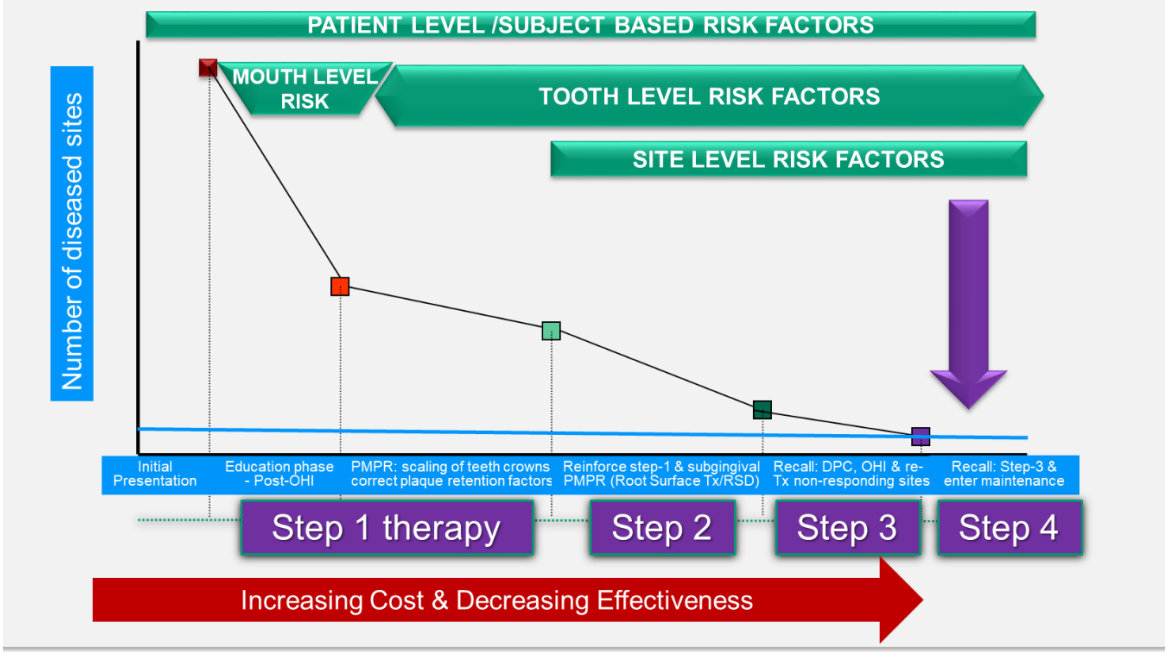


Figure 1 – Risk-driven prevention delivers the greatest periodontal health improvement in Step-1 of care, with deceasing return on investment (time & money) towards Step-2 and 3.

[1] https://www.sciencedirect.com/science/article/pii/S0300571220303109

[2] https://aap.onlinelibrary.wiley.com/doi/abs/10.1902/jop.1995.66.9.756

[3] https://onlinelibrary.wiley.com/doi/full/10.1111/jcpe.12595?casa_token=jy4_LRR1ToQAAAAA%3AvWtV-vwWC1Lj3Gtl7ysXInFjFWkl5SB9PMjAu43XVXPP9FS_ubmHpBdcnZXJVQs4cg9-5uBF_S-4E8

However, the current UDA banding system incentivises step 2 of the diagram, and even then the limited time available can, in some cases lead to a perfunctory approach to periodontal treatment that focuses on endless cycles of inadequate physical debridement, frequently in non-engaged patients, ultimately leading to a costly cycle of failure[4]. Such a process is demotivating to patients, and demoralising for dental care teams. The result is a high level of under-treatment and a failure to reduce the burden of periodontitis to patients, to systemic health and to the economy. This is one reason why more years are lost to disability through caries and periodontitis than any other human disease, a statistic unchanged since 2007[5].

Concept

Whilst recognising there is a medium-term vision to reform the GDS contract towards one that delivers prevention and stabilisation, there is also a short-term need to improve periodontal care provision within the confines of the current system in preparation for future transformational commissioning. A more comprehensive alternative to this brief guidance is the accredited Healthy Gums to Matter (HGDM) toolkit, which allows more flexibility, is recognised as an acceptable claiming structure and for which training is available via HEE.

The Steps of Periodontal Care

Step-1 of care follows disease classification and diagnosis[6]. It involves implementing strategies for patient motivation and behaviour change to achieve improved self-performed oral hygiene and control of local and systemic risk factors to reduce gingival inflammation. It also involves professional mechanical plaque removal (PMPR - including removal of calculus) from the crowns of teeth (supra- and subgingivally) together with the elimination of local plaque retentive factors. A Band-2 course of treatment is permitted for Step-1. Telephone or video re-motivation conversations are recommended between Step-1 and Step-2.

Step-2 of care requires a detailed periodontal pocket and bleeding chart. It involves reduction of sub-gingival biofilm, calculus (on the root), and decontamination of endotoxin-associated cementum. There have been numerous terms applied to this procedure and variations in approach, which are explained in **Appendix 1** of this document. In the S3-Level Guideline[1], the term sub-gingival instrumentation is employed and may be undertaken using hand instruments as a non-aerosol generating protocol (see OCDO *Transition to Recovery – SOP*) or power-driven instruments. Step-2 is ONLY undertaken in engaging patients after a detailed 3-month re-examination/assessment. A Band-2 course of treatment is permitted for Step-2.

Step-3 of care involves a re-examination/assessment after 3-months following Step-2 of care, and a detailed pocket and bleeding chart is repeated along with a plaque score. Those sites not responding are re-instrumented using supra- and subgingival PMPR. In addition, behaviour change support and reinforcement of plaque control and daily interdental cleaning is provided. Non-responder sites are those with pockets ≥5 mm or 4mm sites that bleed on

[4] https://www.journalslibrary.nihr.ac.uk/hta/hta22380#/abstract

[5] https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2932279-7

[6] https://www.nature.com/articles/sj.bdj.2019.3.pdf

probing. Deep periodontal pockets are defined as ≥6 mm. The 4mm pocket that does not bleed on probing is regarded as stable. A Band-2 course of treatment is permitted for Step-3. Step 3 may require significant re-instrumentation as the first and second courses of treatment involve managing all required initial disease and are not just periodontally focussed.

Management of intra-bony and furcation lesions may require referral to a Level-2 or 3 pathway, which may involve:
- Repeated sub-gingival instrumentation with or without adjunctive therapies
- Access Flap Periodontal Surgery for open debridement
- Resective or Regenerative Periodontal Surgery

Step-4 of care involves periodontal maintenance (supportive care) and is a critically important and a very cost effective step in maintaining periodontal stability in a periodontitis patient. Supportive periodontal care combines preventative and therapeutic interventions defined in the first and second steps of therapy, depending on the gingival and periodontal status of the patient's dentition. Time is required to undertake this step and as such a further Band-2 course of treatment is permitted for Step-4.

A granular flow chart mapping of all 4 steps of care to each stage (severity & extent) of periodontitis is illustrated in **Appendix 2** as a guide.

Critical Factors

There is a robust evidence base that undertaking time-consuming subgingival PMPR (root surface debridement) in patients with poor plaque control is ineffective and fails. Therefore, this proposal delineates "engaging" and "non-engaging" patient pathways. Patient engagement is defined below and no patient should proceed to Step-2 of care unless they engage. **Non-engaging patients** will be permitted a further Band-2 course of treatment for a second round of Step-1 to attempt to facilitate patient engagement. However, if that fails then the patient enters a cycle of palliative periodontal care, involving Band-1 payments for a brief Step-1 of care, every 6-months for stages I and II periodontitis and every 3-months for stages III and IV. If a non-engaging patient starts engaging, then they progress to Step-2 of care. If there is a reason for non-engagement, such as limited dexterity for plaque control or a need for professional behaviour change management, the referral to level-2 is required.
A non-engaging patient may undertake a single band 2 course of treatment annually thereafter if, in the judgment of that dentist/hygienist this could lead to patient engagement. It is recognised that a significant number of patients will not engage and the resources released should be re-invested in the care of engaging patients.

Defining the engaging patient at the end of Step-1

There is no black and white threshold for defining adequate plaque control, as every patient is different in terms of their risk, and therefore the threshold of plaque score they need to achieve. For example, a young patient with Grade C periodontitis (rapidly progressing despite apparently adequate oral hygiene) may require a plaque score <10%, whereas Grade A periodontitis patient may achieve stability with a plaque score of 30%. Therefore, the definitions below are for the "average patient" and represent a minimum requirement to progress to Step-2 of the pathway.

Engaging Patient

The engaging patient demonstrates a favourable response to self-care advice and sufficient improvement in oral hygiene as indicated by a 50% or greater improvement in plaque (disclosing is required) and marginal bleeding scores, OR:

- Indicative Bleeding Levels ≤30% (10% in a Level 2/3 setting)
- Indicative Plaque Levels ≤20%
- AND a stated preference to achieving periodontal health

Non-engaging patient

The non-engaging patient demonstrates an unfavourable response to self-care advice and insufficient improvement in oral hygiene as indicated by less than a 50% improvement in plaque and marginal bleeding scores, OR:

- Indicative Bleeding Levels >30% (10% in a Level 2/3 setting)
- Indicative Plaque Levels >20%
- OR a stated preference to a palliative approach to periodontal care

Plaque and Bleeding Scores may be recorded on "Ramfjord's teeth" for speed, i.e. UR6, UL1, UL4, LL6, LR1 and LR4, using mesial, distal, buccal, lingual surfaces (24 scores). For missing teeth, use the nearest equivalent tooth. Marginal bleeding (different from bleeding on probing) is preferred when assessing patient engagement.

Documented outcomes to define stability

The number of pockets that are >4mm (or 4mm bleeding sites) and number of teeth present in the mouth should be documented at the start of treatment (submitted via FP-17 form) **and also** at the start of Step-4 of care. As a guide, an endpoint of ≤4 sites with probing pocket depths of ≥5mm is deemed consistent with disease remission/control after active treatment.

Summary

Overall the proposed model supports those patients who take responsibility for their own oral health by investing in their care, but it is essential the dental team change their own behaviour and focus on supporting the prevention messaging. The model presented is non-linear model and front-loads step-1, is loss making in step-2, but recovers costs in steps-3 and 4. There is a relative dis-investment in periodontal care for those patients who consciously decide their periodontal health is not a priority for them, or who do not engage in risk factor control and improved oral hygiene. There is also a safety net for the non-engaging patient, with Band-1 visits remaining until that patient decides to engage. Step-1 of care can be delivered under Band-1 every 3- (stage III-IV) 6-months (stage I, II) for such patients until they engage, when the patient progresses to Step-2 of care. **Appendix 3** provides a summary of the steps for phased-periodontal care.

Resources

British Society of Periodontology and Implant Dentistry New Classification Flow Charts
British Society of Periodontology and Implant Dentistry S3-Level Guideline Flow Chart
British Society of Periodontology and Implant Dentistry S3-Level Guideline video-animation of Steps of Care

Appendix 1

Changes in periodontal terminology & alignment to 2020 S3-Level Treatment Guidelines

Previous / former / historical Term	Description of terminology (current usage of these terms)	New Terminology Group	Step in treatment guidelines	Use in Supportive Periodontal Therapy
Scaling of crown of tooth/restoration	Removal of plaque, staining and supra-gingival calculus from the crown of a tooth/restoration (including the gingival crevice, which is sub-gingival)	**Supra-gingival PMPR**	Steps 1, 4	YES
Scaling & polishing (Historical) **Obsolete Term**	Removal of plaque, staining and supra-gingival calculus (including the gingival crevice) from the crown of a tooth/restoration		Steps 1, 4	YES
Polishing (including traditional and air polishing)	Removal of plaque and extrinsic staining from supra-gingival surfaces		Steps 1, 4	YES
Prophylaxis	Removal of plaque and extrinsic staining from supra-gingival surfaces		Steps 1, 4	YES
Scaling of root of tooth	Removal of sub-gingival plaque and calculus from root surfaces	**Sub-gingival PMPR**	Steps 2, 3 ,4	YES
Sub-gingival scaling	Removal of sub-gingival plaque and calculus from root surfaces		Steps 2, 3 ,4	YES
Sub-gingival debridement	Systematic removal of sub-gingival plaque, calculus and endotoxin from root surfaces		Steps 2, 3 ,4	YES
Sub-gingival instrumentation	Systematic removal of sub-gingival plaque, calculus and endotoxin from root surfaces		Steps 2, 3 ,4	YES
Root surface debridement	Systematic removal of sub-gingival plaque, calculus and endotoxin from root surfaces		Steps 2, 3 ,4	YES
Root surface instrumentation	Systematic removal of sub-gingival plaque, calculus and endotoxin from root surfaces		Steps 2, 3 ,4	YES
Root planing	Removal of all sub-gingival calculus and necrotic cementum from root surfaces - an outdated term and concept which is not generally achievable in routine clinical practice	N/A	N/A	NO
Curettage	The removal of the lining of a periodontal pocket without surgical flap elevation - an outdated term and concept which is not generally used in routine clinical practice, **except when draining a periodontal abscess, as the abscess lies in the pocket wall**	Draining a periodontal abscess	Management of an acute periodontal abscess	NO

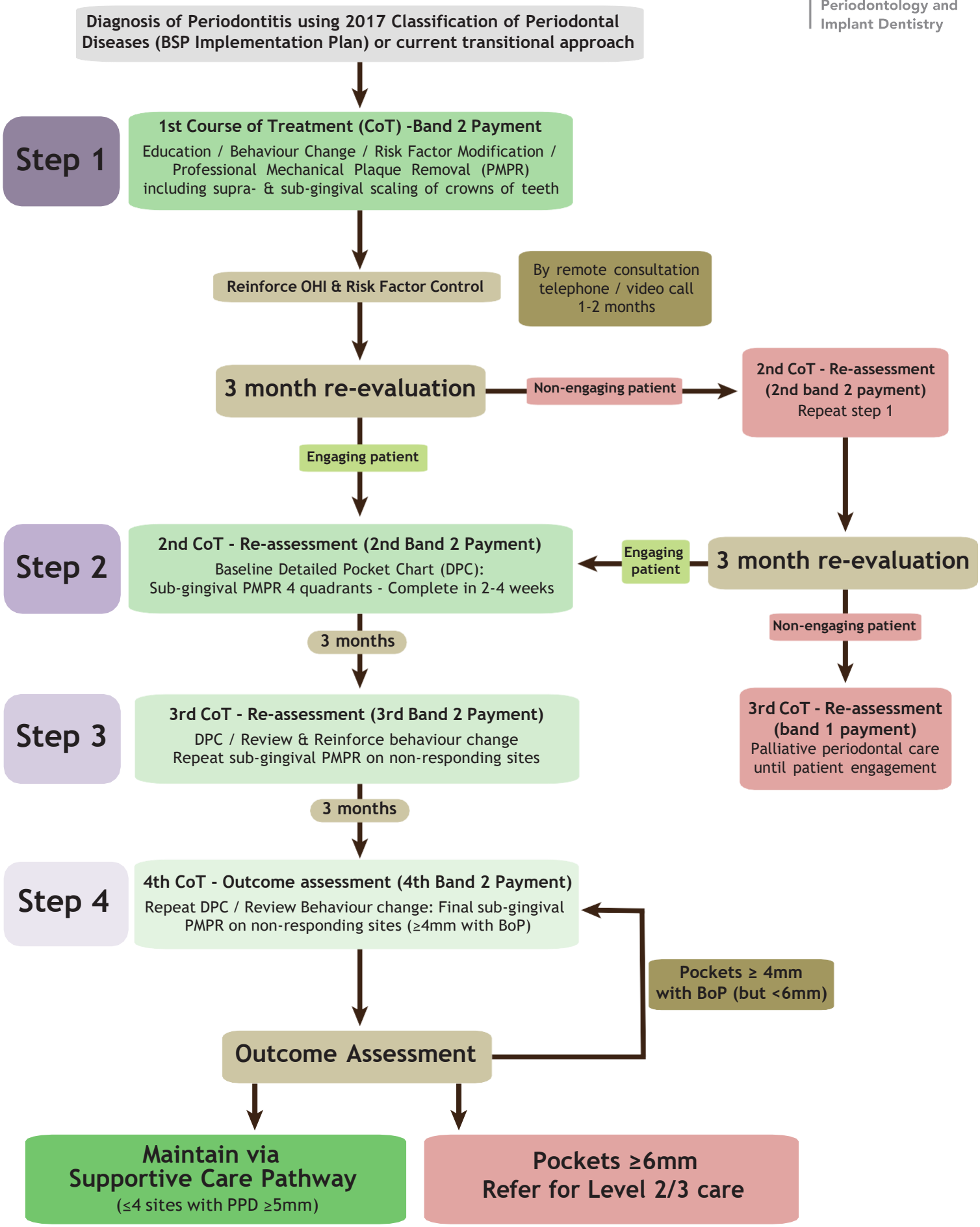
Appendix 2

Phased steps periodontal of care & funding pathways by diagnosis – adapted to UDA system

2017 Classification Term **Severity** (Transitional terminology)	**Stage I Periodontitis** (Mild <15% bone loss)		**Stage II Periodontitis** (Moderate) Bone loss within coronal 1/3r of root		**Stage III Periodontitis** (Severe) Bone loss within mid 1/3rd of root		**Stage IV Periodontitis** (Very Severe) Bone loss within apical 1/3rd of root	
Extent *For molar-incisor pattern in patient <30 years old refer to Level-2 or 3 service*	Localised (< 30% of teeth)	Generalised (≥ 30% of teeth)	Localised (< 30% of teeth)	Generalised (≥ 30% of teeth)	Localised (< 30% of teeth)	Generalised (≥ 30% of teeth)	Localised (< 30% of teeth)	Generalised (≥ 30% of teeth)
For Engaging patients only Evidenced by 50% reduction in Plaque score or plaque score <20% & 50% reduction in Bleeding score or bleeding score <30% (lower than *Healthy Gums do Matter* due to disclosing)	Step 1 ⇩ Step 4	Step 1 ⇩ Step 2 ⇩ Step 4	Step 1 ⇩ Step 2 ⇩ Step 3 ⇩ Step 4	Step 1 ⇩ Step 2 ⇩ Step 3 ⇩ Step 4	Step 1 ⇩ Step 2 ⇩ Step 3 *& refer with findings to Level 2 / 3 service*	Step 1 ⇩ Step 2 ⇩ Step 3 *& refer with findings to Level 2 / 3 service*	Step 1 ⇩ Step 2 *& refer with findings to Level 3 service*	Step 1 ⇩ Step 2 *& refer with findings to Level 3 service*
All grade C cases (rapid progression) follow the Stage IV pathway **All grade B cases (moderate progression)** follow Stage III pathway	Maintain according to risk		Maintain 3-monthly		Maintain 3-monthly		Maintain 3-monthly	
For Non-engaging patients NB: Patients with dexterity problems, medical co-morbidities or requiring specialist behaviour change may need referral - Level 2	Step 1 ⇩ Step 1		Step 1 ⇩ Step 1		Step 1 ⇩ *Refer to Level 2 or 3 service* if available **OR -** 2nd Step 1		Step 1 ⇩ *Refer to Level 3 service* if available **OR** - 2nd Step 1	

Phased Management of Periodontitis in NHS General Dental Practice - Full Care Pathway adapted to UDA Banding

BSP British Society of Periodontology and Implant Dentistry



Notes:
Remote consultation by dentist / hygienist /therapist or Oral Health Educator
Non-engaging pts offered a 2nd band 2 STEP-1 attempt to engage, then 3/12ly Band 1 Step 1 until engage